

ETC/ETBC-D-2  
18 August 1958  
CIA-487983

25X1X7 SUGGESTED AGENDA AND STATEMENT OF OBJECTIVES FOR  
ELECTRONICS CONFERENCE  
ECONOMIC INTELLIGENCE SESSION

First Day:\* Session Devoted to the Electronics Equipment Industry.

Theme and Objectives

The electronics industry of the USSR has achieved remarkable postwar growth in scientific and technical capabilities and in the scale and range of product output. As a consequence, the stature of the industry has risen from its position as a major limiting factor in military weapons systems programs to a level at which its potential to achieve major technological breakthroughs is estimated to be approximately on a par with the West.

During this same time period the USSR has developed an electronics production base which in absolute size and in production technology is capable of carrying major scientific and technical achievements into production. It has, however, remained difficult to determine the extent to which conflicting demands for specialized materials and components may exercise quantitative restrictions on specific weapons systems programs and more narrowly circumscribe the range of choices available in Soviet production planning.

It is suggested, therefore, that whereas the absolute size of the electronics industry will remain an important intelligence target, such highly aggregative measures are of limited value in the context of this conference, and in terms of quantitative estimates of specific weapons systems production. The Board of National Estimates of the United States has selected this weakness as one requiring increased analytical emphasis. Despite the extreme importance attached to the problem, the nature of currently available source material severely restricts any hope that the required answers will be forthcoming quickly or easily.

- 
- \* The first day of these sessions will follow immediately the last day of the Scientific and Technical Sessions. As presently scheduled, the first day will fall on either the 15th or 16th of October, 1958.

~~SECRET~~

25X1X7

The subject is therefore considered to be appropriate for presentation to the conference as a matter of joint concern [REDACTED] It is hoped that as a result of joint consideration new analytical approaches may be brought to light and additional collection efforts can be examined.

The papers and discussion will focus on the range of priority intelligence questions relating to Bloc capabilities to translate available science and technology into specific weapons systems, the conflicting demands for materials and components which may be expected to pose serious problems to the Bloc, and on possible methods for quantifying the most relevant limiting factors. Examples will be provided from United States intelligence analysis.

Conference Papers

Author

1. On improvements in methods for obtaining quantitative estimates of production of electronics for specific weapons systems.

US/CIA/RR/I/EE is prepared to present papers on these subjects, but would welcome the addition of papers prepared [REDACTED]

2. Evidences of Bloc vulnerabilities in the production of critical electronic components and materials.

" 25X1X7

3. Production and utilization of semi-conductor elements in the USSR. The state of productive capabilities and factors determining rate of substitution of semi-conductors in place of electron tubes.

" "

4. Production trends in the Electronics Industries of the European Satellites and Communist China related to the augmentation of total Bloc Military Capabilities.

" "

Second Day: Session Devoted to Telecommunications Facilities.

Theme and Objectives

The indicated overall postwar progress of the electronics industry of the USSR, as reflected in scientific and technological developments and in scale and range of product output, does not appear to be reflected by the quality and quantity of electronics products employed in existing basic telecommunications operating resources. If this observation is valid, then it appears that the USSR continues to suffer from priorities insofar as basic telecommunications operating facilities are concerned. In terms of estimated plant in being and of present and future need, these facilities lag from five to ten years behind other priority electronics achievements. The reasons for this situation are not clear. In fact, Soviet realism normally would suggest that the situation would not be permitted to exist.

The papers and discussion with respect to telecommunications facilities and services address themselves to the general question of the status of USSR facilities and services. Although the papers treat specific aspects of the general problem, it is hoped that discussion of the individual papers will contribute to a better judgment on the general question. For this purpose the last paper in this series can be used as a base for bringing together the judgments of the conferees and, to the extent of disagreement, for assembling suggestions on a plan for attacking residual problems.

Conference Paper

Author

1. Soviet Arctic Telecommunications (North of 60° North Latitude)  
A brief presentation, centered primarily around maps showing existing telecommunications facilities, of the present status of Soviet Arctic telecommunications and an analysis of future requirements. Attention will be given to the telecommunications problems imposed by Arctic conditions and to the means by which these problems might be overcome.

Note: <sup>25X1X7</sup> It is suggested [redacted] present the major paper on this subject, possibly an updating and expansion of the chapter dealing with telecommunications in their published report of 1 October 1955 on Arctic and Sub-Arctic Activities so that S/COM's paper will be a secondary paper for purposes of comparing similarities and discovering differences in evaluations.  
US/CIA/ORR/S/COM

Conference Paper

Author

2. The Impact of the USSR Industrial Reorganization of 1957 on Post and Telecommunications Plans and Patterns

US/CIA/ORR/S/COM

An evaluation of the effects of the 1957 reorganization on post and telecommunications in the USSR. Included will be an analysis of present facilities and an evaluation of present and future requirements. Successes so far achieved and indications of future problems also will be discussed.

3. Trends in Soviet Choice of High-capacity Telecommunications Facilities to Overcome Major Trunkline Weaknesses

US/CIA/ORR/S/COM

The paper will present the present status of Soviet trunkline facilities, will highlight the major weaknesses that are estimated to exist, and will discuss both the announced and estimated action by the USSR to overcome these weaknesses through the use of coaxial and multi-conductor cable, microwave radio relay, scatter, and possibly wave guide facilities. Factors determining the choice of facilities will be discussed.

4. Soviet-Bloc Frequency Usage

US/ONI and US/CIA/  
CR/RSB

5. Trunkline Communications Requirements of the Soviet Air Defense System. Present and Projected, and Noted Deficiencies.

25X1D0a

Author Undetermined  
/It is suggested that  
US/AFSCIN is in a position to supply this paper/.

Author Undetermined  
/It is suggested that  
US/NSA is in a position to supply this paper/.

7. Telecommunications Requirements of Soviet Ground Forces to Support Land Operations Beyond Soviet Borders

US/ACSI

Conference Paper

Author

8. Critique of CIA/RR 138,  
"Economic Intelligence Survey of  
Post and Telecommunications  
Services in the USSR"

US/CIA/ORR/S/COM

Copies of this report will be distributed in advance to the conferees for the purpose of soliciting reaction to the report. To facilitate conference discussion, a proposed discussion-outline will be prepared and attached to the distributed report.

Third Day:

Morning Session

Summary discussion concerning all papers presented in the Economic Session for the purpose of establishing a generalized agreement on an integrated approach to electronics production and telecommunications facilities problems. Emphasis to be placed on establishing major areas of concern and attempting to establish some organized approach for the resolution of major problems.

Afternoon Session

Discussion of significant developments in Sino-Soviet Bloc Electronics and Telecommunications which were highlighted by the Intelligence papers presented in the Scientific and Technical session. Discussion will be limited to the careful selection of those points of most direct relevance to Economic Intelligence in order to indicate trends in science and technology which will require more careful scrutiny by Economic Intelligence in the near future.